

## CLAIMS

1. A data converter, comprising:

a memory means (140) for storing an original file having at least layout

5 information and attribute data describing at least one function of one or more information apparatuses; and

a conversion means (118) for converting said original file on the basis of said attribute data, wherein

said conversion means includes:

10 a first file conversion means for generating a file that is expressible in a predetermined first data format as a result of conversion processing on the basis of data that is included in said original file; and

a second file conversion means for generating a file that is expressible in a predetermined second data format as a result of conversion processing on the basis of data that is included in said original file, and

said data converter further comprises

15 an output means (114) for outputting a file that has been outputted from said conversion means to an information apparatus which corresponds to said attribute data.

20 2. The data converter according to claim 1, wherein

said first file converting means converts said original file to a file that is expressible with raster data on the basis of said layout information, and

said second file converting means converts said original file to a file that is expressible with vector data on the basis of said layout information.

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3. The data converter according to claim 2, wherein

said data converter further comprises a determination means for determining whether or not it is necessary to convert said original file by means of either said first file

converting means or said second file converting means on the basis of said attribute data,  
said first file converting means converts said original file to a file that is  
expressible with said raster data on the basis of data that is included in said original file if  
said determination means determines that conversion by said first file converting means  
is necessary, and

5           said second file converting means converts said original file to a file that is  
expressible with said vector data on the basis of data that is included in said original file  
if said determination means determines that conversion by said second file converting  
means is necessary.

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4. The data converter according to claim 2, wherein  
said data converter further comprises a determination means for determining  
whether or not it is necessary to convert said original file on the basis of said attribute  
data,

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said first file converting means converts said original file to a file that is  
expressible with said raster data on the basis of data that is included in said original file if  
said determination means determines that it is necessary to convert said original file, and  
said second file converting means converts said original file to a file that is  
expressible with said vector data on the basis of data that is included in said original file  
20           if said determination means determines that it is necessary to convert said original file.

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5. The data converter according to claim 2, wherein said output means  
includes a transmission means for outputting data for scaling down and displaying said  
outputted file to an information apparatus which corresponds to said attribute data via a  
communication line.

6. The data converter according to claim 5, wherein  
said data converter further comprises a reception means for receiving a request

for transmission of said outputted file via a communication line, and  
said transmission means transmits a file that is expressible with said vector data  
to an information apparatus which corresponds to said attribute data on the basis of said  
request for transmission.

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7. The data converter according to claim 2, wherein  
said data converter further comprises:  
a file storing means for storing said outputted file;

10 a preparation means for preparing access data for access to said data converter  
or said outputted file; and  
an access data transmission means for transmitting said access data to an  
information apparatus which corresponds to said attribute data via a communication line.

8. The data converter according to claim 7, wherein said output means  
15 includes a transmission means for outputting data for scaling down and displaying said  
outputted file to an information apparatus which corresponds to said attribute data via a  
communication line.

9. The data converter according to claim 8, wherein  
20 said outputted file includes a plurality of files,  
said transmission means outputs data for scaling down and displaying each of  
said number of files,

said data converter further comprises a reception means for receiving a request  
for transmission of any of said number of files via a communication line, and

25 said transmission means transmits a file that is expressible with said vector data  
to an information apparatus which corresponds to said attribute data on the basis of said  
request for transmission.

10. The data converter according to claim 9, wherein  
said data converter further comprises:  
a generation means for generating a message which requires input of validation  
information to access said outputted file on the basis of a predetermined system; and  
5 an addition means for adding said message to said outputted file,  
said output means outputs the file to which said message has been added to an  
information apparatus which corresponds to said attribute data, and  
said data converter further comprises:  
a means for receiving input information that has been inputted by the user of an  
10 information apparatus which corresponds to said attribute data; and  
a validation means for validating access to said outputted file on the basis of said  
validation information and said input information.
11. The data converter according to claim 2, wherein  
15 said data converter is connected to a printing apparatus via a communication line,  
and  
said output means includes a means for outputting said outputted file to said  
printing apparatus.
- 20 12. The data converter according to claim 2, wherein  
said data converter further comprises a confirmation means for confirming  
whether or not said outputted file satisfies predetermined conditions, and  
said first file conversion means includes:  
a condition changing means for changing the conditions for the conversion of  
25 said original file if said outputted file does not satisfy said predetermined conditions; and  
a means for converting said original file on the basis of said changed conditions.
13. The data converter according to claim 12, wherein

the conditions for converting said original file include the data compression ratio of said original file,

under said predetermined conditions, the size of said outputted file is smaller than a predetermined size, and

5           said condition changing means increases said data compression ratio if the size of said outputted file is greater than said predetermined size.

10          14. The data converter according to claim 1, wherein said data converter further comprises a reception means for receiving said original file via a communication line.

15          15. The data converter according to claim 1, wherein  
              said data converter further comprises a determination means for determining whether or not it is necessary to convert said original file on the basis of said attribute data, and

              said conversion means outputs said original file without converting the original file when said determination means determines that it is not necessary to convert said original file.

20          16. The data converter according to claim 1, wherein said conversion means converts said original file for each section of data that has been predetermined in said original file.

25          17. A data conversion method comprising the steps of:  
              preparing an original file having at least layout information and attribute data describing at least one function of one or more information apparatuses in advance; and  
              converting said original file on the basis of said attribute data (S1100), wherein  
              said conversion step includes the steps of:

generating a file that is expressible in a predetermined first data format through a conversion process on the basis of data included in said original file; and

generating a file that is expressible in a predetermined second data format through a conversion process on the basis of data included in said original file, and

5           the method further comprises the step of outputting the file that has been outputted from said conversion step to an information apparatus which corresponds to said attribute data (S1014).

10         18. A program for causing a computer to function as a data converter, wherein said program causing said computer to execute the steps of:

preparing an original file having at least layout information and attribute data describing at least one function of one or more information apparatuses in advance; and converting said original file on the basis of said attribute data (S1100), wherein said conversion step includes the steps of:

15         generating a file that is expressible in a predetermined first data format through a conversion process on the basis of data included in said original file; and

generating a file that is expressible in a predetermined second data format through a conversion process on the basis of data included in said original file, and

20         said program further causing said computer to execute the step of outputting the file that has been outputted from said conversion step to an information apparatus which corresponds to said attribute data (S1014).

19. A computer-readable recording medium which stores the program according to claim 18.